Stopover sites for migratory birds

David Ewert

The Nature Conservancy

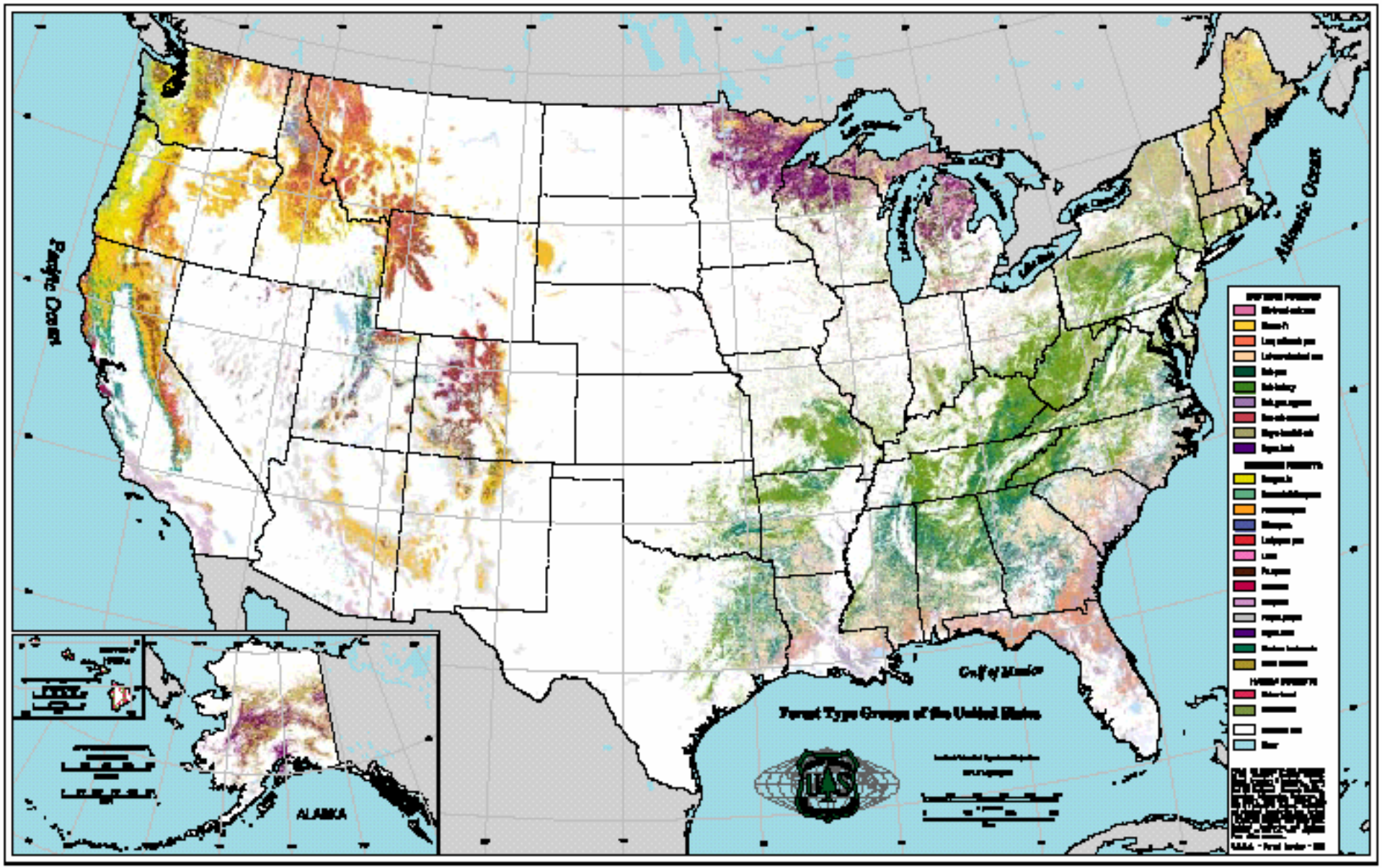
Why conserve migratory stopover habitat?

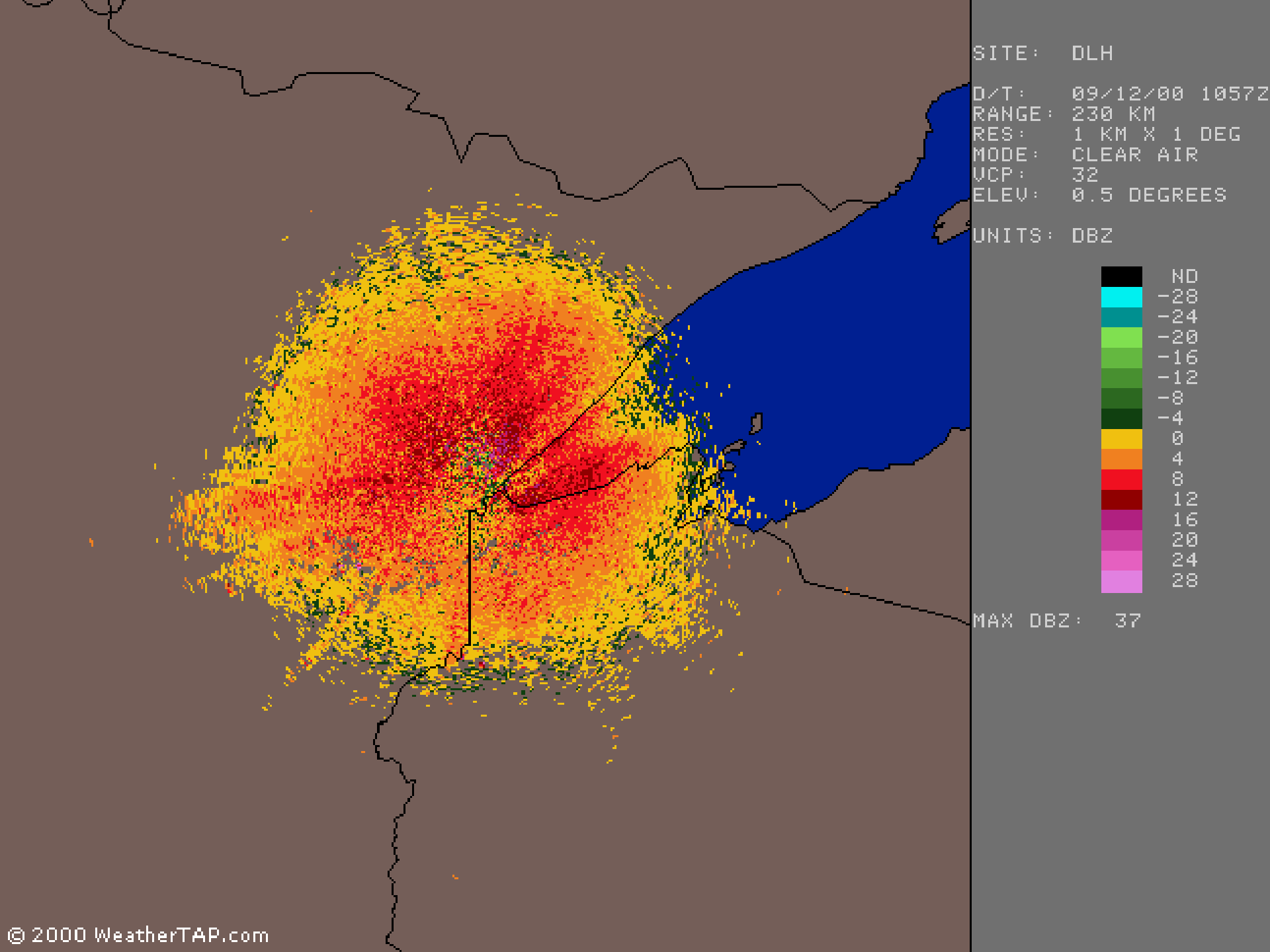
- Migration is energetically demanding; a period of vulnerability
- Birds arriving on breeding grounds in good condition may have higher fitness
- Many stopover sites are threatened

"...Apparent mortality rates were at least 15 times higher during migration compared to that in stationary periods...more than 85% of apparent adult mortality...occurred during migration."

Sillett and Holmes (2002)

Forest Type Groups of the United States (US Forest Service)

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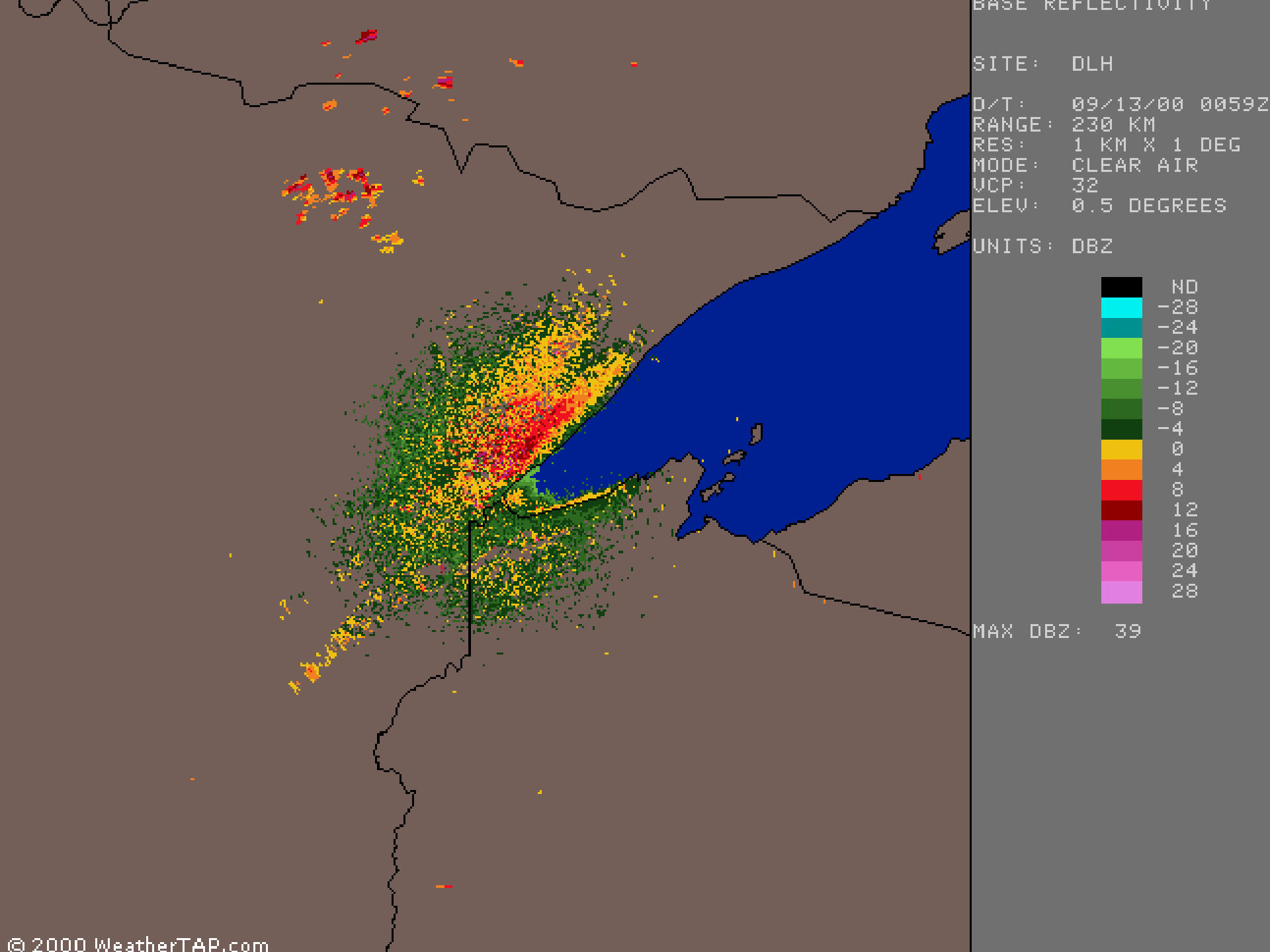
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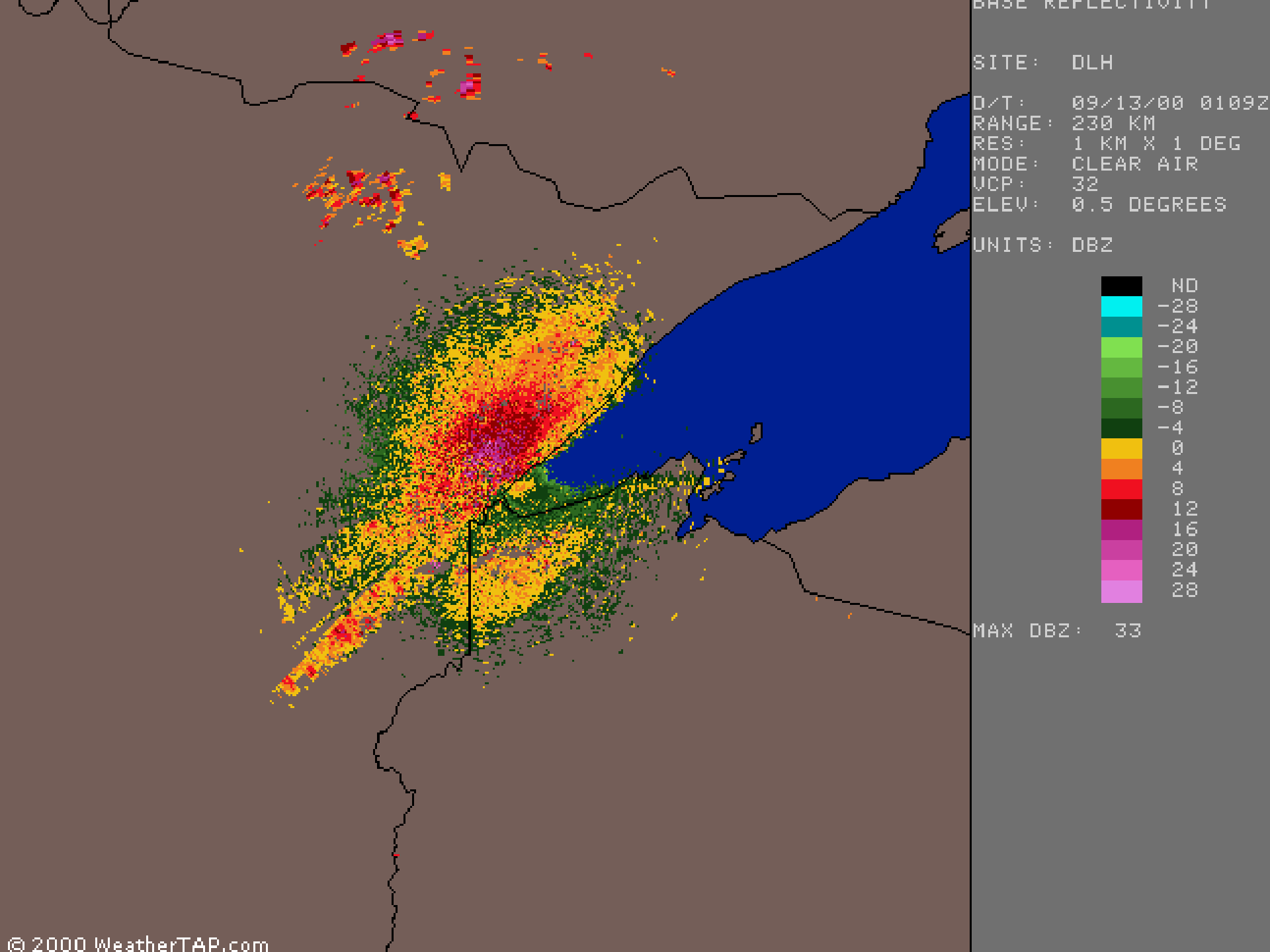
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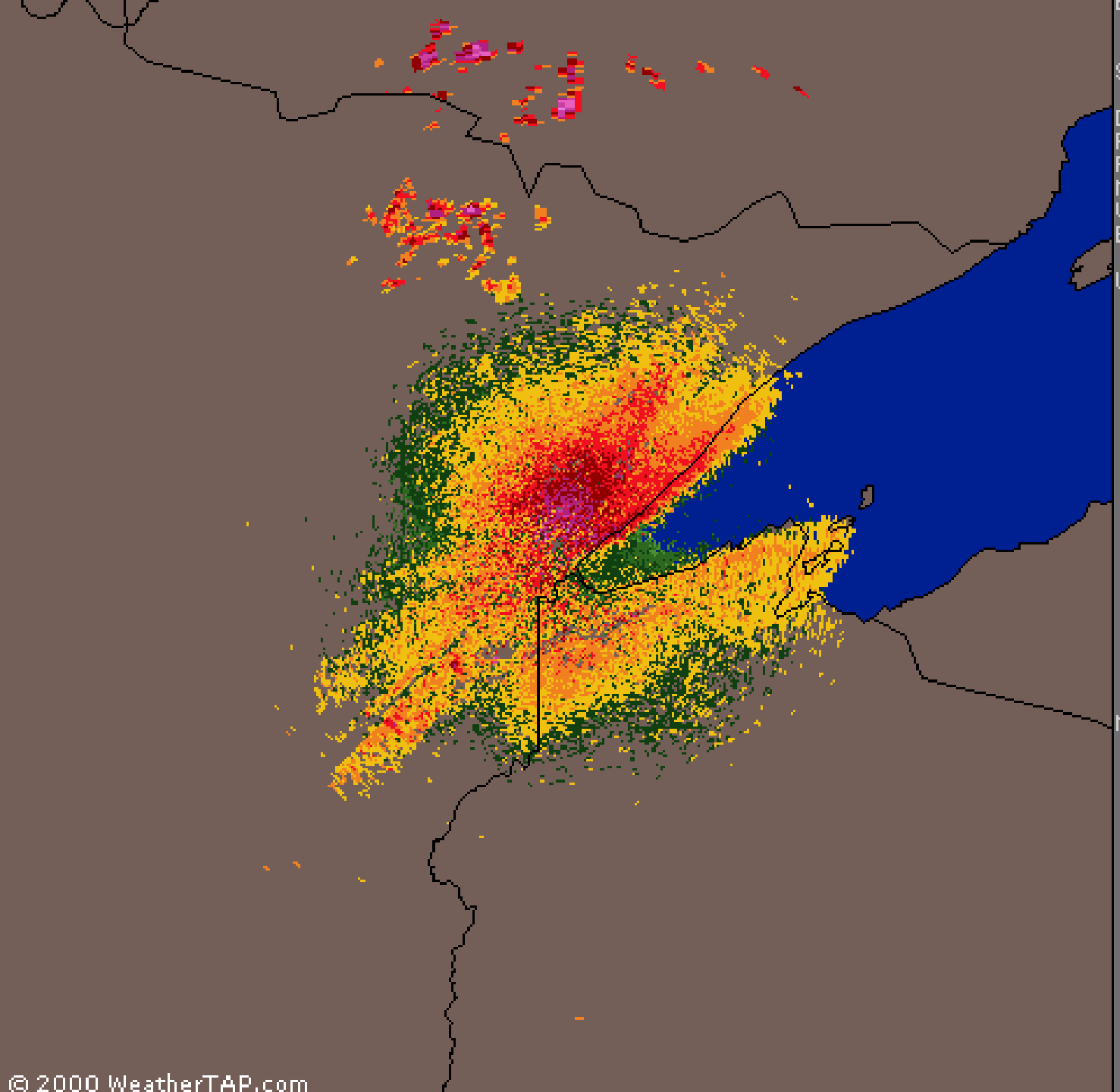
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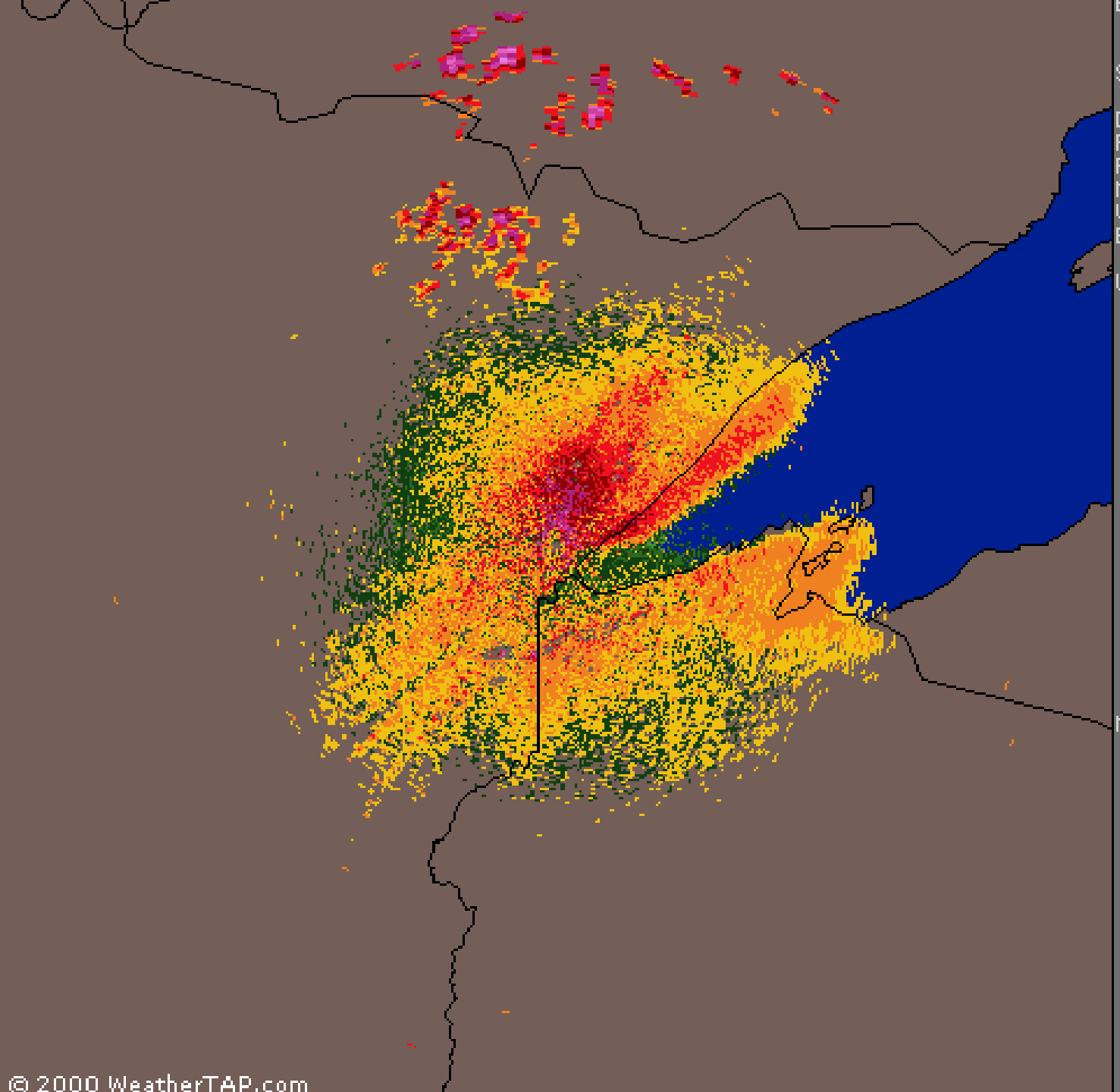
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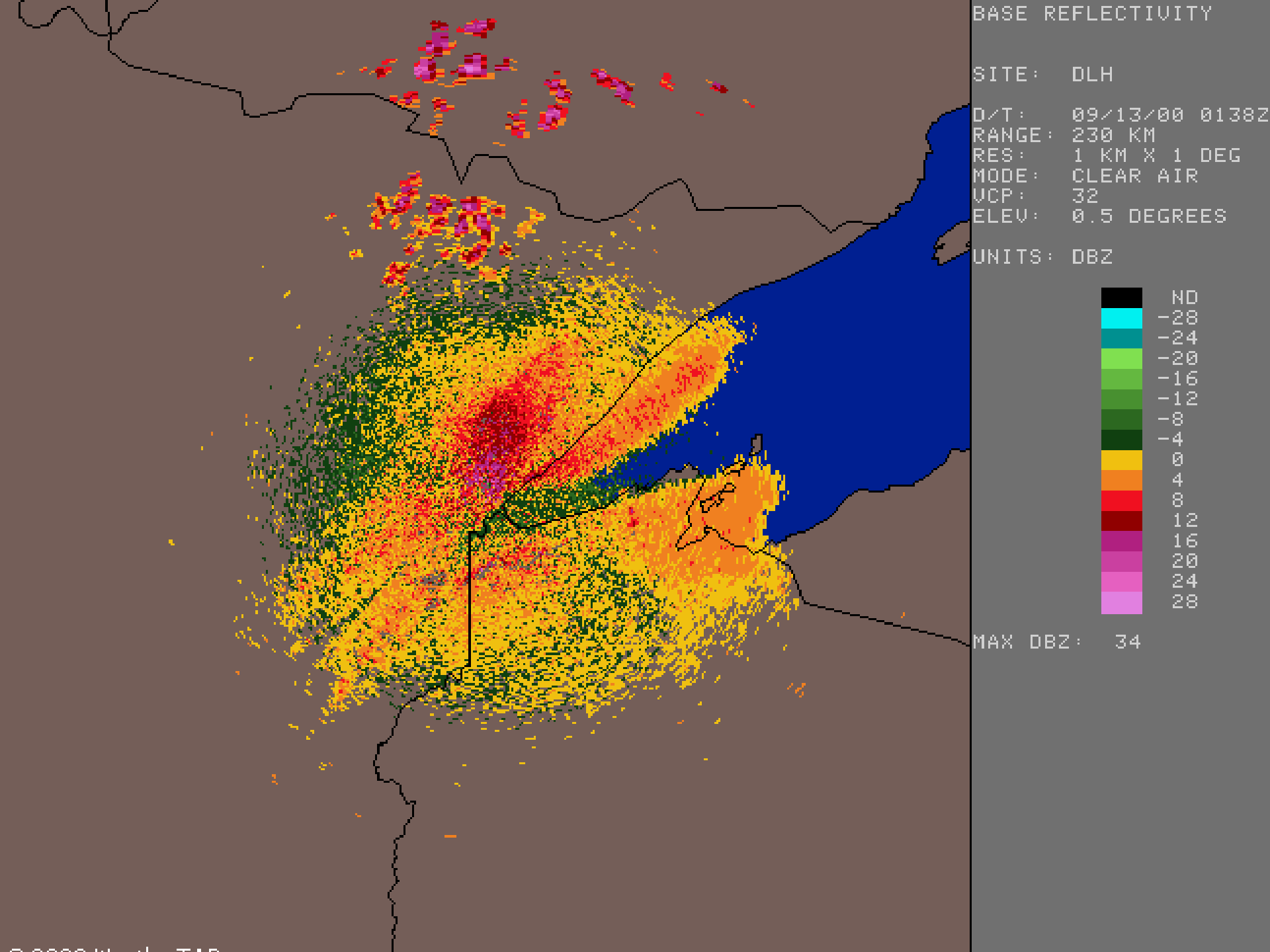
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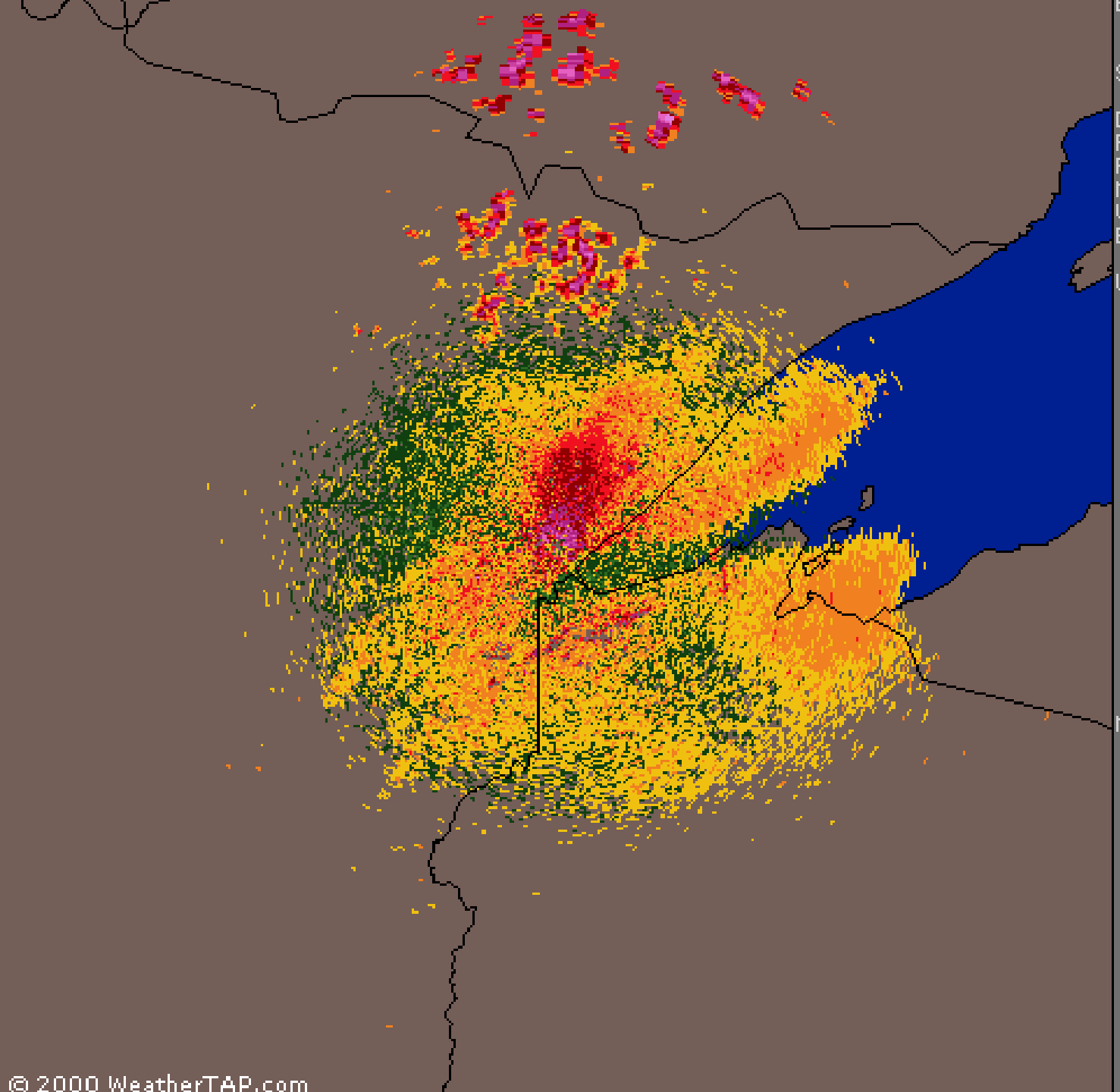
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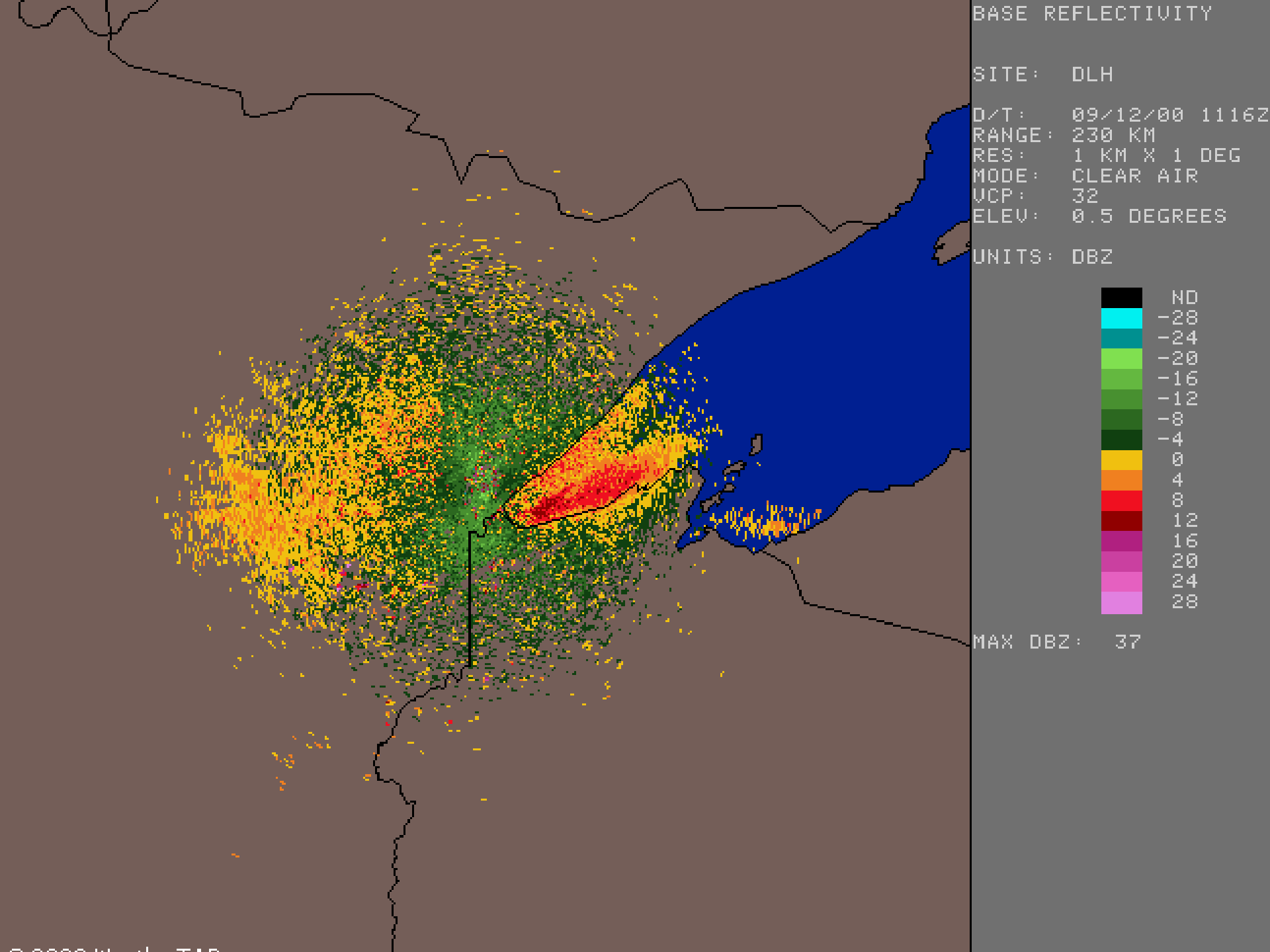
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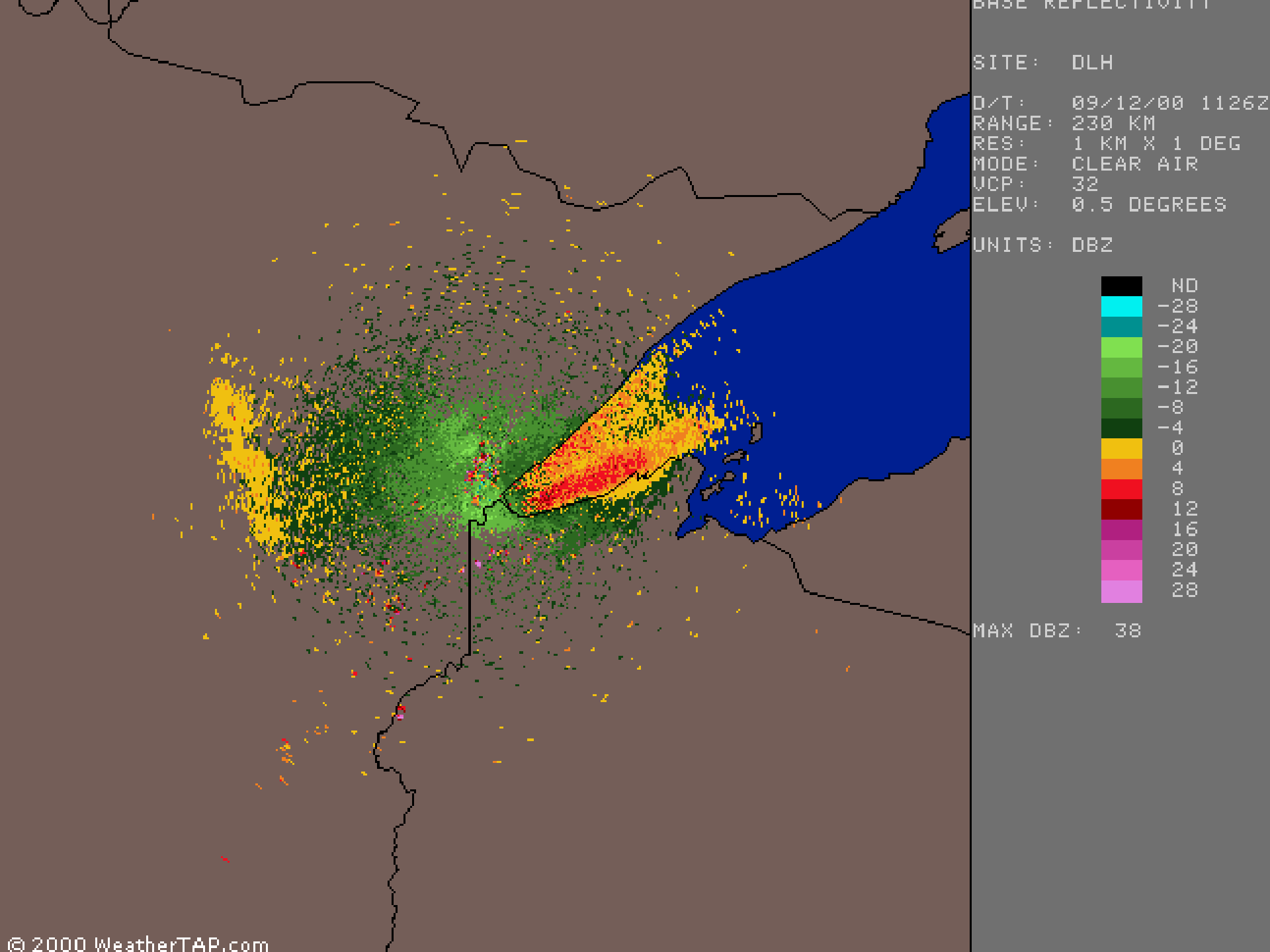
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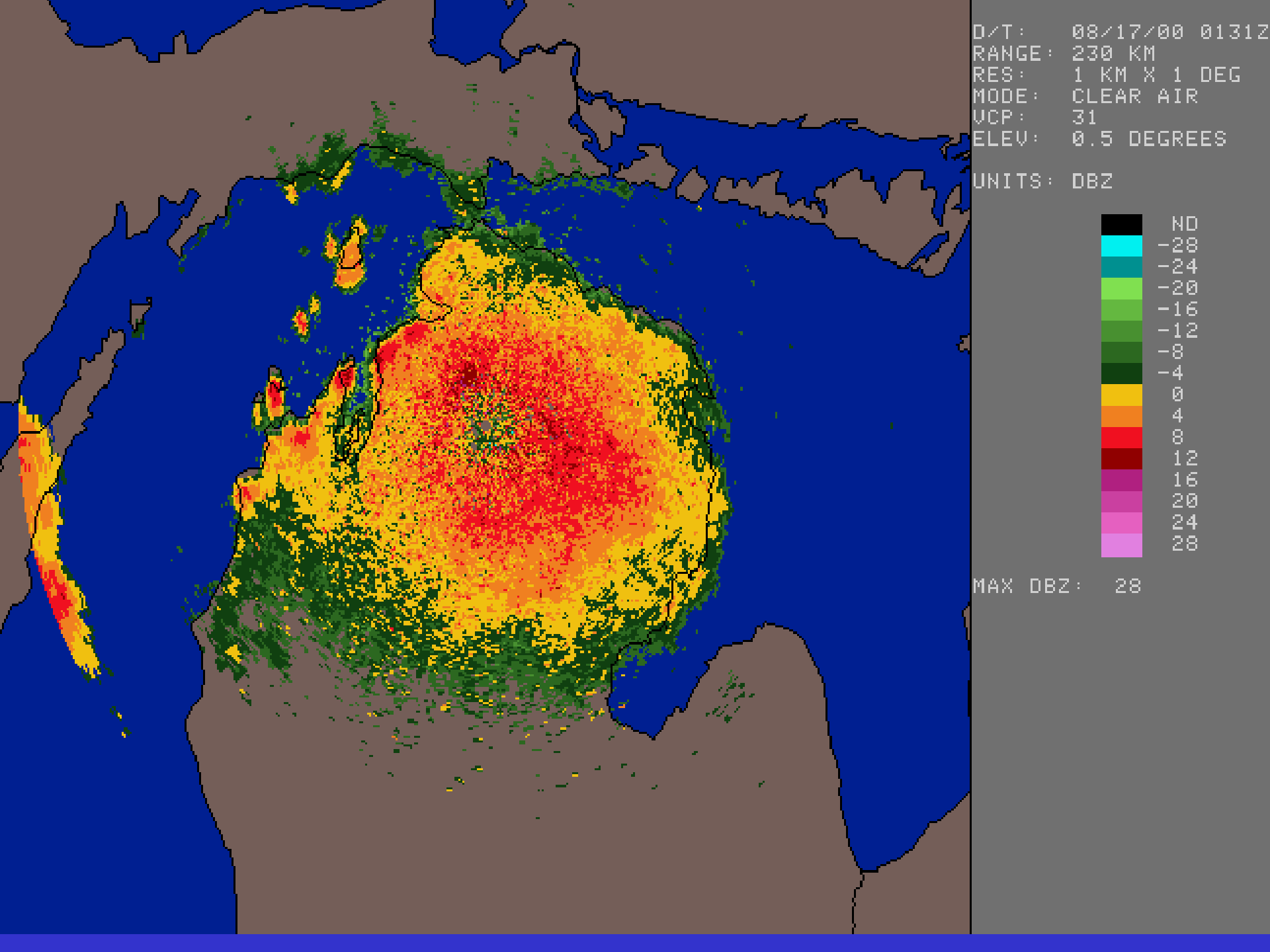
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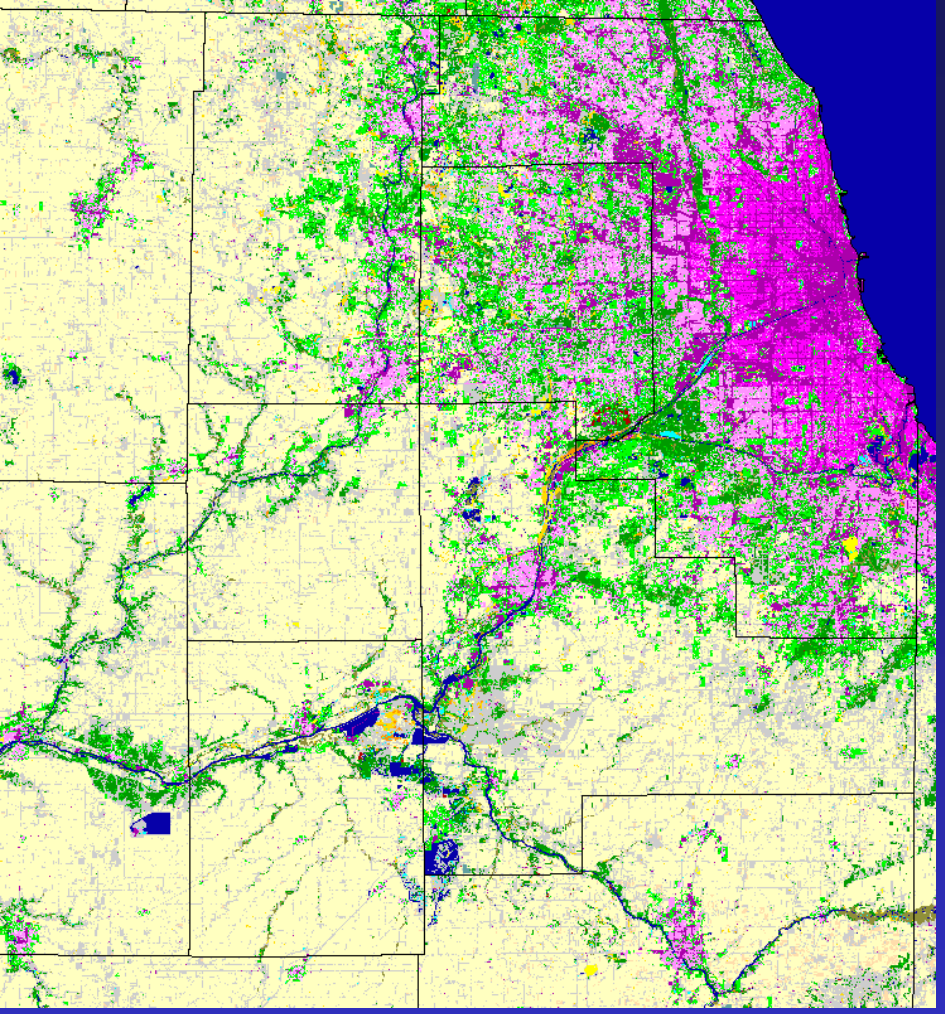
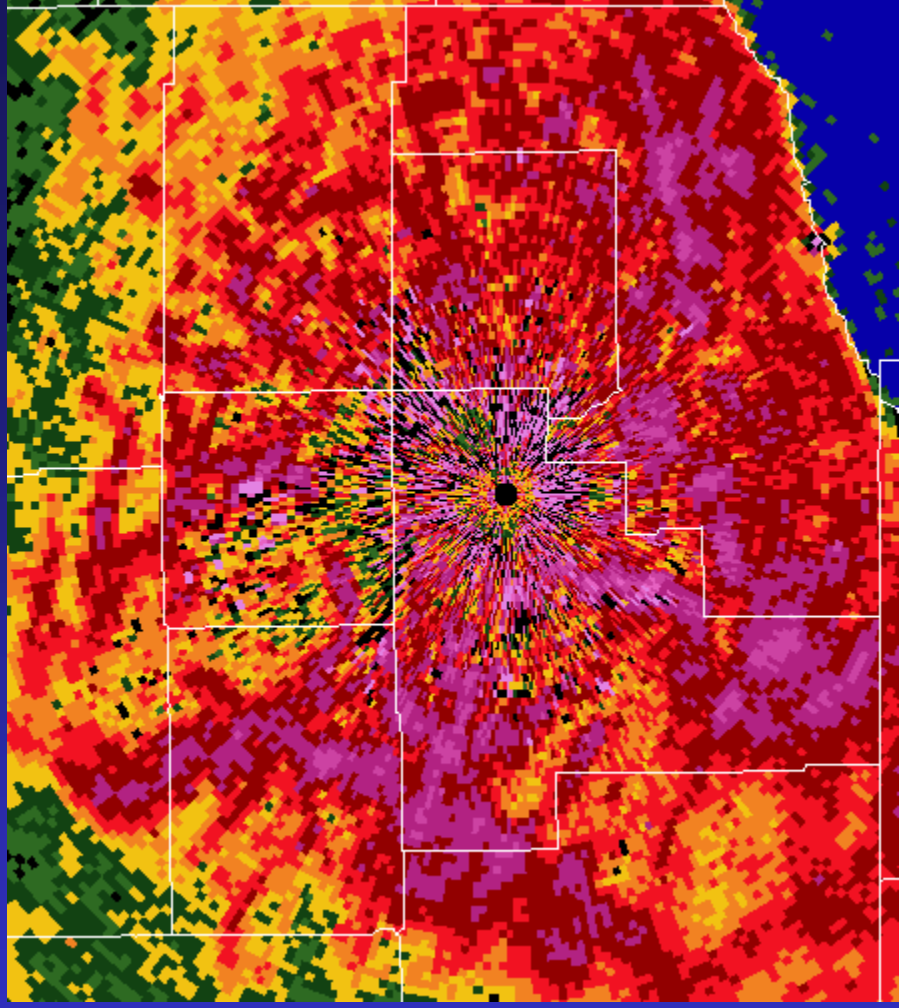
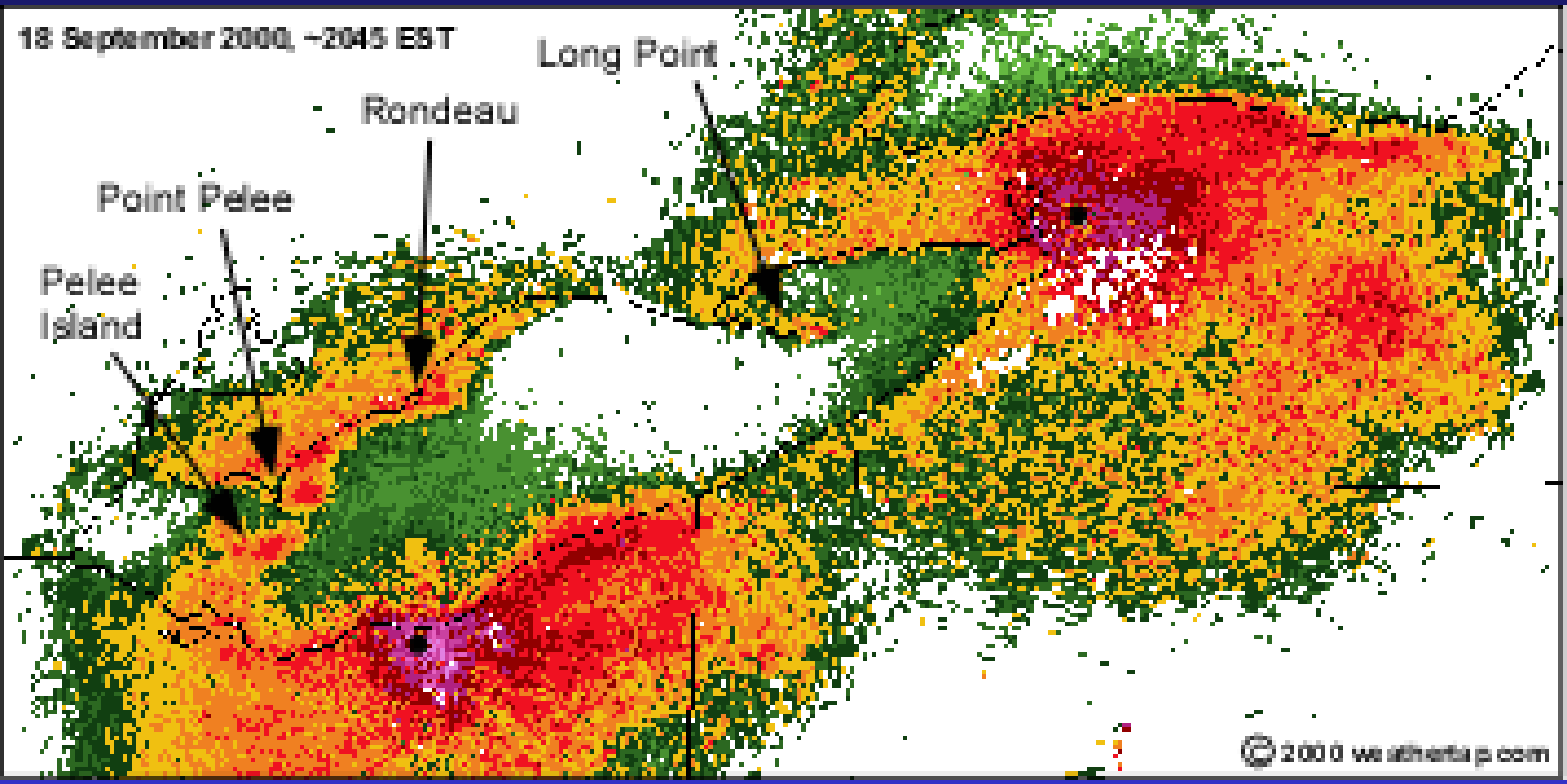




Goals of western Lake Erie basin stopover project

- Identify attributes of stopover sites for all groups of birds
- Map sites with these attributes
- Overlay distribution of other biodiversity
- Protect sites, including outreach

◆ Protected Stopover site


18 September 2000, ~2045 EST
Long Point
Rondeau
Point Pelee
Pelee Island
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Stopover sites: landbirds

- Diverse, structurally complex plant communities, certain plant species, water
- Spring: high aquatic insect productivity
- Fall: sites with high insect/fruit production
- Proximity to Great Lakes
- Isolated patches in altered landscapes

Threats to stopover sites

- Habitat loss
- Fragmentation
- Community composition/structure change
- Invasive species
- Water quality degradation
- Hydrological changes
- Towers, buildings, light

Protecting stopover sites

- Acquisition, easements
- Management
- Land use policy
- Education
- Ecotourism

Stopover sites: general criteria

- Relative migrant abundance
- Percent of population using site
- Consistency of use (spring/fall; year)
- Presence of resources (food, water, shelter)
- Proximity to other sites
- Condition of birds

Recent and near-term projected work

- Working group in place
- Draft of stopover site attributes complete
- Mapping – early 2005
- Outreach – early 2005
- Pilot projects – 2005
- Expansion of project – Feb. 2005

Collaborators

- Black Swamp Bird Observatory
- Consumers Energy
- Detroit Edison
- Ducks Unlimited
- The George Gund Foundation
- Great Lakes Islands Collaborative – GLNPO/EPA
- Michigan Department of Natural Resources
- The Nature Conservancy – GL, MI, OH
- Ohio Department of Natural Resources
- The Ohio State University
- University of Michigan - Dearborn
- U.S. Fish and Wildlife Service
- Wildlife Habitat Council